

WHAT IS CLAIMED IS:

1. A ligating apparatus comprising:

an introducing tube which can be inserted in a living body cavity; a manipulating wire inserted in the introducing tube in such a manner that the manipulating wire can freely advance or retreat; a clip having a base end to which a tip end of said manipulating wire is directly joined without using an engaging means; and engaging means disposed in at least one of the base end of said clip and the tip end of said manipulating wire, wherein at least one of the engaging means is deformed and releases engaging of said clip and said manipulating wire, when a force for detaching the base end of said clip from the tip end of the manipulating wire is applied.

2. A mechanism according to claim 1 wherein a deformable hook projected in a direction opposite to a direction of an arm portion is disposed in the base end of said clip.

3. A mechanism according to claim 1 wherein a closed loop portion is disposed in the tip end of said manipulating wire.

4. A mechanism according to claim 3 wherein the loop portion is ruptured and the engaging of the clip and the manipulating wire is released, when the force for detaching said clip base end from the tip end of the manipulating wire is applied.

5 5. A mechanism according to claim 1 wherein a hole through which the tip end of said manipulating wire can be inserted is formed in the base end of the clip, and a bulged portion larger than the hole is disposed in the tip end of the manipulating wire.

10 6. A mechanism according to claim 1 wherein a clip tightening ring is attached to an arm portion of said clip to close a holding portion of the clip, and the engaging means is disposed in at least one of the introducing tube and the clip tightening ring to prohibit the clip tightening ring from being contained again in the introducing tube, when the clip and the clip tightening ring project forwards from the introducing tube.

15 7. A mechanism according to claim 6 wherein a deformable hook projected in a direction opposite to a direction of said arm portion is disposed in the base end of said clip.

20 8. A mechanism according to claim 6 wherein a closed loop portion is disposed in the tip end of said manipulating wire.

25 9. A mechanism according to claim 8 wherein the loop portion is ruptured and the engaging of the clip and the manipulating wire is released, when the force for detaching said clip base end from the tip end of the manipulating wire is applied.

10. A mechanism according to claim 6 wherein

a hole through which the tip end of said manipulating wire can be inserted is formed in the base end of the clip, and a bulged portion larger than the hole is formed in the tip end of the manipulating wire.

5 11. A mechanism according to claim 1 wherein a manipulating member is inserted through said introducing tube in such a manner that the manipulating member can freely advance and retreat, the manipulating wire is inserted through the manipulating member in
10 such a manner that the manipulating wire can freely advance and retreat, and a clip tightening ring is attached to an arm portion of said clip to close a holding portion of said clip.

15 12. A mechanism according to claim 11 wherein a deformable hook projected in a direction opposite to a direction of said arm portion is disposed in the base end of said clip.

20 13. A mechanism according to claim 11 wherein a closed loop portion is disposed in the tip end of said manipulating wire.

25 14. A mechanism according to claim 11 wherein the loop portion is ruptured and the engaging of the clip and the manipulating wire is released, when the force for detaching the base end of said clip from the tip end of the manipulating wire is applied.

15 15. A mechanism according to claim 11 wherein a hole through which the tip end of said manipulating

wire can be inserted is formed in the base end of the clip, and a flat bulged portion larger than the hole is formed in the tip end of the manipulating wire.

16. A ligating apparatus comprising:

5 an introducing tube which can be inserted in a living body cavity; a manipulating wire inserted through the introducing tube in such a manner that the manipulating wire can freely advance or retreat; a clip having a base end and a holding portion formed in an arm portion extending from the base end; a hole which
10 is formed in the base end of said clip and through which said manipulating wire can be inserted; and a bulged portion which is disposed in a tip end of the manipulating wire inserted through said hole and which
15 has a diameter larger than a diameter of said hole.

17. A mechanism according to claim 16 wherein a clip tightening ring attached to the arm portion of said clip to close the holding portion of the clip; and a manipulating member inserted through the introducing
20 tube disposed behind the clip tightening ring in such a manner that the manipulating member can freely advance or retreat.

18. A mechanism according to claim 16 wherein a clip tightening ring attached to the arm portion of said clip to close the holding portion of the clip; engaging means, disposed in at least one of the
25 introducing tube and the clip tightening ring, for

prohibiting the clip tightening ring from being contained again in the introducing tube, when the clip and the clip tightening ring project forwards from the introducing tube; and a manipulating member inserted through the introducing tube disposed behind the clip tightening ring in such a manner that the manipulating member can freely advance or retreat.

19. A mechanism according to claim 16 wherein the tip end of said manipulating wire is crushed in a flat shape, and a bulged portion is formed.

20. A mechanism according to claim 16 wherein a pipe-shaped member is attached to the tip end of said manipulating wire, and a bulged portion is formed.

21. A ligating apparatus comprising:

an introducing tube which can be inserted in a living body cavity; a manipulating wire inserted through the introducing tube in such a manner that the manipulating wire can freely advance or retreat; and at least two clips each of which has a base end and a holding portion formed in an arm portion extending from the base end, wherein two or more clips are arranged in series, a hole through which said manipulating wire can be inserted is formed in the base end of each clip, and a bulged portion larger than the hole is disposed in the tip end of the manipulating wire inserted through the hole in the base end of the clip.

22. A mechanism according to claim 21 wherein

a clip tightening ring attached to the arm portion of said clip to close the holding portion of the clip; and a manipulating member inserted through the introducing tube disposed behind the clip tightening ring disposed in a closest position in such a manner that the manipulating member can freely advance or retreat.

23. A mechanism according to claim 21 wherein a clip tightening ring attached to the arm portion of said clip to close the holding portion of the clip; engaging means, disposed in at least one of the introducing tube and the clip tightening ring, for prohibiting the clip tightening ring from being contained again in the introducing tube, when the clip and the clip tightening ring project forwards from the introducing tube; and a manipulating member inserted through the introducing tube disposed behind the clip tightening ring disposed in the closest position in such a manner that the manipulating member can freely advance or retreat.

24. A mechanism according to claim 21 wherein the tip end of said manipulating wire is crushed in a flat shape, and a bulged portion is formed.

25. A mechanism according to claim 21 wherein a pipe-shaped member is attached to the tip end of said manipulating wire, and a bulged portion is formed.

26. A ligating apparatus comprising:
two or more clips which can be fastened in

a living tissue; an introducing tube which can guide said clip into a living body cavity and which has flexibility; and a manipulating mechanism which can successively fasten the two or more clips in the living body cavity, wherein said introducing tube including at least said clips is packaged in a curved state having a radius of 15 mm or more or a straightened state, when said ligating apparatus is packaged.

27. A ligating apparatus comprising:

two or more clips which can be fastened in a living tissue; an introducing tube which can guide said clip into a living body cavity and which has flexibility; and a manipulating mechanism which can successively fasten the two or more clips in the living body cavity, wherein said introducing tube including said clips is positioned before a curved portion of an endoscope.

28. A mechanism according to claim 27 wherein all the clips are disposed in a position of 125 mm or less from the tip end of said introducing tube.

29. A ligating apparatus comprising:

a clip which can be fastened in a living tissue; an introducing tube which can guide said clip into a living body cavity and which has flexibility; a manipulating mechanism which can fasten said clip in the living body cavity; and a mechanism which can extend/open the once closed clip again and can close

the clip again.

30. A twined wire comprising:

5 at least two twined material wires; and a loop
formed in a tip end of the twined wire using at least
one of said material wires, wherein the material wire
with the loop formed therein is twined back again on a
base end of the twined wire.

31. A mechanism according to claim 30 wherein said
material wire is constituted of a twined material wire.

10 32. A mechanism according to claim 30 wherein
three or more material wires are intertwined to form
the twined wire.

33. A mechanism according to claim 1 wherein at
least one of two or more material wires intertwined to
15 form a twined wire is used to form a loop in a tip end
of the twined wire, and the material wire with the loop
formed therein is twined back again with the twined
wire to constitute a manipulating wire.

20 34. A mechanism according to claim 1 wherein at
least one of two or more material wires intertwined to
form a twined wire is used to form a loop in a tip end
of the twined wire, and the material wire with the loop
formed therein is twined back again with the twined
wire to constitute joint means.